

BUREAU OF AUTOMOTIVE REPAIR

INITIAL STATEMENT OF REASONS

Hearing Dates: June 4 and 6, 2001.

Subject Matter of Proposed Regulations: Smog Check Inspection Procedures; Liquid Fuel Leak Inspection.

Section Affected: Section 3340.42.

Problem Addressed:

State law charges the Bureau of Automotive Repair (Bureau) with the responsibility of implementing a Smog Check program that meets Federal and State mandates. The State Implementation Plan (SIP) adopted in 1996 estimated that the Enhanced Smog Check program would reduce the emissions of Hydrocarbons (HC) and Oxides of Nitrogen (NO_x). Moreover, the Federal government required an evaporative system test for which the SIP took full credit. To date, California has only implemented the gas cap portion of the test and, therefore, is not fully in compliance with the SIP or the Federal Register regarding this requirement.

Unfortunately, an evaluation conducted prior to the summer of 1999 found that the smog check program fell short of the SIP goal, since the new procedures achieved a reduction of only 36 percent of the SIP target. A subsequent Air Resources Board (ARB) report found that these and other shortcomings caused the state's shortfall on emissions reductions committed to in the SIP. Consequently, the failure to comply with Federal mandates risks sanctions, which include loss of highway funds and lawsuits. The National Resource Defense Council has already filed a Notice of Intent to Sue the State and individual agencies for failure to comply with the federal Clean Air Act Amendments of 1990 and the SIP. Therefore, the department needs new and improved procedures to further reduce the release of these pollutants into the atmosphere.

Specific Purpose of Regulatory Proposal:

The proposed regulatory action will establish a visual inspection for liquid fuel leaks as part of the protocol for vehicles subject to the Smog Check program. In addition to the current gas cap test, a simple visual inspection of the vehicle's components for liquid fuel leaks would be required. These procedures will enable smog check stations and technicians to identify defects in fuel delivery, metering and evaporative systems in order to affect appropriate repairs, thereby eliminating or significantly reducing non-exhaust-related volatile organic compound emissions.

In addition, the proposed regulatory action will make conforming editorial changes in the current regulation. The opening sentence of the opening paragraph will be amended to clarify that smog check stations and smog check technicians are responsible for complying with the applicable emissions inspection standards and tests. The references to other sections in the opening paragraph of Section 3340.42 will be changed to reflect the proper sections that

incorporate the BAR Test Analyzer System Specifications and the BAR Emissions Inspection System Specifications. Also, the current subsection (b), which applies to a previous test-only pilot program that was conducted in the Sacramento Area, will be deleted.

Factual Basis:

Bureau staff recently conducted a roadside study to determine the frequency that vehicles have liquid fuel leaks and determined that approximately 2 percent of the vehicle fleet have such leaks. Although these leaks may appear small in nature, they could account for as much as 50 tons per day (tpd) of HC being released into the air. The liquid fuel leak procedure is a simple visual inspection process that would reduce HC emissions by 30 – 60 percent.

The Eastern Research Group, Inc. (ERG) published a report entitled *Evaporative Emissions Impact of Smog Check*, September 15, 2000. This report was prepared jointly by ERG and the Bureau to evaluate evaporative emissions. This report indicates that liquid fuel leak evaporative emissions range between 33 and 54 tpd of HC. Consequently, repairing these defective systems provides a minimum reduction of 11 tpd of HC, assuming a minimum 33% repair effectiveness.

Finally, Smog Check improvement strategies include these changes to the Smog Check inspection procedure and have been approved by the California Air Resources Board. In addition, these strategies aid in resolving the current lawsuit threatened by the National Resources Defense Council for failure to comply with the SIP by the January 2000 target date. The combined reductions achieved by implementing the visual inspection process assist the Bureau in achieving the mandated emission reductions from California's vehicle fleet and is an absolute necessity for SIP compliance.

The opening paragraph of Section 3340.42 refers to sections 3340.17(a) and (b) as relating to the BAR Test Analyzer System Specifications and the BAR Emissions Inspection System Specifications. However, those specifications are now referenced and incorporated in Sections 3340.16.7(a) and (b). Furthermore, the current subsection (b) applies to a test-only pilot study conducted in the Sacramento Area of the enhanced program area. The pilot study has been completed for some time now and the Sacramento Area is now subject to all the same program requirements as any other enhanced area. This subsection is no longer necessary.

Underlying Data:

Technical, theoretical or empirical studies or reports relied upon:

1. *Revised State Implementation Plan for California's Motor Vehicle Inspection & Maintenance Program*, Bureau of Automotive Repair, December 1995.
2. *Smog Check II Evaluation Executive Summary*, California Inspection and Maintenance Review Committee, June 19, 2000.
3. *Evaluation of California's Enhanced Vehicle Inspection and Maintenance Program (Smog Check II)*, California Air Resources Board, July 12, 2000.

4. Program Improvement Plan, Letter dated August 17, 2000, from Air Resources Board to Regional Administrator, Region IX, U. S. Environmental Protection Agency.
5. *Evaporative Emissions Impact of Smog Check*, California Bureau of Automotive Repair, Eastern Research Group, and de la Torre Klausmeier Consulting, Inc., September 15, 2000.

Business Impact:

This regulation will not have a significant adverse economic impact on businesses.

Specific Technologies or Equipment:

This regulation does not mandate the use of specific technologies or equipment.

Consideration of Alternatives:

No reasonable alternative which was considered or that has otherwise been identified and brought to the attention of the Bureau would be either more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed regulation.

No reasonable alternative has been considered or identified thus far.